

What is claimed is:

1. A fixing device using induction heating for causing alternating current to pass through electromagnetic induction coils, which are arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein the fixing of said electromagnetic induction coils to each other and the fixing of said core to said coils are carried out by an adhesive material mixed with mica.
2. A fixing device as set forth in claim 1, wherein said material is a heat resistant material which is resistant to 200°C or higher.
3. A fixing device as set forth in claim 1, wherein said material is a polyimide resin.
4. A fixing device as set forth in claim 1, wherein said material is a single liquid resin.
5. A fixing device as set forth in claim 1, wherein said material is an epoxy resin.
6. A fixing device as set forth in claim 1, wherein said material is a silicone resin.
7. A fixing device as set forth in claim 1, wherein the mixing ratio of said mica to said material is 50% or less by weight.
8. A fixing device as set forth in claim 1, wherein said endless member is a roller.
9. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed,

wherein said electromagnetic induction coil is wound onto a core of a non-magnetic material coated with a resin or paint.

10. A fixing device as set forth in claim 9, wherein said material is a heat resistant material which is resistant to 200°C or higher.

11. A fixing device as set forth in claim 9, wherein said material is a polyimide resin.

12. A fixing device as set forth in claim 9, wherein said material is a single liquid resin.

13. A fixing device as set forth in claim 9, wherein said material is an epoxy resin.

14. A fixing device as set forth in claim 9, wherein said material is a silicone resin.

15. A fixing device as set forth in claim 9, wherein said material is mixed with mica powder.

16. A fixing device as set forth in claim 15, wherein the mixing ratio of said mica to said material is 50% or less by weight.

17. A fixing device as set forth in claim 9, wherein said endless member is a roller.

18. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil is wound around a first axis, and said coil thus wound is fixed by winding a heat resistant bundling band onto said coil around a second axis substantially perpendicular to said first axis.

19. A fixing device as set forth in claim 18, wherein said endless member is a roller.

20. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil is wound around a first axis, and said coil thus wound is fixed by a molded body of a heat resistant material having a member wound onto said coil around an axis perpendicular to at least said first axis.

21. A fixing device as set forth in claim 20, wherein said endless member is a roller.

22. A fixing device using induction heating for causing alternating current to pass through electromagnetic induction coils, which are arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein a heat resistant, insulating and heat conductive sheet for providing both of heat radiation and insulation of said coils is provided on the surfaces of said coils.

23. A fixing device as set forth in claim 22, wherein said coils are wound in the form of multilayer, and said sheet is provided between adjacent two of said coils serving as vertically adjacent two layers and/or on the surfaces of said coils.

24. A fixing device as set forth in claim 22, wherein said endless member is a roller.

25. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member

having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil is wound onto a core of a non-magnetic material, and a heat resistant, insulating and heat conductive sheet for providing both of heat radiation and insulation of said coils is provided between the surface of said core and said coil.

26. A fixing device as set forth in claim 25, wherein said endless member is a roller.

27. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein the center of said coil in axial directions is offset from the center of said endless member, which serves as an object to be heated, in axial directions in accordance with thermal load of said endless member.

28. A fixing device as set forth in claim 27, wherein said endless member is a roller.

29. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil is wound onto a core of a non-magnetic material, and said core has a hole extending in directions substantially perpendicular to the axis of said core.

30. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed,

wherein said coil is wound onto a core of a non-magnetic material, and said core has a first hole extending in the axial directions of said core.

31. A fixing device as set forth in claim 30, wherein said hole passes through said core.

32. A fixing device as set forth in claim 30, wherein said core has a second hole extending in directions substantially perpendicular to the axis of said core.

33. A fixing device as set forth in claim 30, which further comprises blowing means for blowing into said first hole.

34. A fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil, which is arranged so as to be close to an endless member having a metal layer of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil has a plurality of unit wires, each of which comprises a conductor coated with a first insulating coating, and said plurality of unit wires are coated with a second insulating coating to doubly isolate said coil from said endless member.